

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

DEC - 3 2003

4APT-APB

William G. Ross, Jr., Secretary North Carolina Department of Environment & Natural Resources 1601 Mail Service Center Raleigh, North Carolina 27699-1601

Dear Secretary Ross:

Thank you for making recommendations on 8-hour ozone air quality designations. Your letter is an important step in providing citizens of North Carolina with information on air pollution levels where they live and work. Levels of ground-level ozone have improved significantly since the Clean Air Act (CAA) was amended in 1990 at which time 135 areas were designated as not attaining the 1-hour ozone standard. Since that time nearly half those areas (67) have cleaned up their air to meet the 1-hour ozone standard and have been redesignated as attaining that standard. However, many areas have still not met the less stringent 1-hour ozone standard, and in 1997 the U.S. Environmental Protection Agency (EPA) promulgated a more stringent 8-hour ozone national ambient air quality standard. Thus, much work remains to be done. Under the CAA, EPA is required to promulgate designations for new or revised standards, such as the 8-hour ozone standard. Earlier this year, after several public interest groups filed a lawsuit claiming EPA had not met the statutory deadline for designating areas for the 8-hour ozone standard, we entered into a consent decree that requires us to promulgate designations by April 15, 2004.

The CAA defines a nonattainment area as any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant. EPA guidance indicates that North Carolina should use the larger of the Consolidated Metropolitan Statistical Area (CMSA), Metropolitan Statistical Area (MSA), or the 1-hour ozone nonattainment area as the presumptive boundary for 8-hour ozone nonattainment areas. The guidance provides 11 factors that North Carolina should consider in determining whether to modify the presumptive boundaries. We have reviewed your July 15, 2003, letter submitting North Carolina's recommendations on air quality designations for the 8-hour ozone standard. We have also reviewed the extensive justification information you have submitted to support your recommendations for areas that differed from the presumptive boundaries. We appreciate the effort the State has made to develop this supporting information. Consistent with section 107(d)(1) of the CAA, this letter is to inform you that, based upon the information contained in your submittal, EPA intends to make modifications to North Carolina's recommended designations and boundaries.

We recognize that you have considered the eleven factors identified in EPA's National designation guidance as you developed your recommendations. However, based on a review of

your submittal, the EPA Headquarters' Office of Air and Radiation believes the information you provided is not sufficient to justify the conclusion that the partial counties identified below should be excluded from the applicable nonattainment area. Equally important, the way in which the these factors were evaluated is not consistent with the manner in which other states and EPA regions have applied these same factors. A nationally consistent view of the eleven factors is essential to ensuring the fair and equitable National implementation of the 8-hour ozone standard and achievement of public health protection for all citizens.

Additionally, the EPA Headquarters' Office of Air and Radiation believes that all MSA counties that are part of an Early Action Compact (EAC) area that contains a violating ozone monitor should be included as part of one area that would be designated as nonattainment. EPA is issuing a proposed rule to defer the effective date for these areas for so long as they continues to meet the milestones required for EAC areas. In North Carolina, we intend to modify the State's recommendation to include: Stokes and Yadkin Counties in the Greensboro-Winston Salem-High Point area. EPA will work with the State over the next few months to determine whether any information the State submits by February 6, 2004, justify drawing different boundaries for the nonattainment area.

EPA has been tracking preliminary 2003 ozone monitoring data and its impact on areas' preliminary 2001-2003 design values. Based on preliminary data from the 2003 ozone season, it appears that the Asheville area as well as the Blue Ridge, Black, Great Craggy, and Great Balsam Mountains may be in attainment. It is critical for North Carolina to expedite submittal of 2003 monitoring data to EPA so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality. To advance this process, please submit your final 2003 monitoring data into the Air Quality System as quickly as possible, if that has not already been done. In addition, please submit the 8-hour and 1-hour ozone design values and the average expected 1-hour exceedance rate to Beverly Banister, Director, Air Pesticides and Toxics Management Division, by December 17, 2003.

The enclosures to this letter provide tables in which EPA identifies the counties that should be included in each nonattainment area. Enclosure 1 contains a description of areas where EPA intends to modify North Carolina's recommendations, and the basis for such modification. Enclosure 2 provides information on those areas/counties which do not require modification, but which differ from EPA's presumptive boundaries.

We look forward to a continued dialogue with North Carolina as we work to finalize the designations for the 8-hour ozone standard. We appreciate your efforts and will review any future supporting information the State wishes to submit on these recommendations. If you have

any questions, please do not hesitate to contact Beverly Banister at (404) 562-9326 or Kay Prince, Chief, Air Planning Branch, at (404) 562-9026.

Sincerely,

I. Palmer, Jr.

Regional Administrator

Enclosure

cc: Keith Overcash, NCDENR

Enclosure 1

The following table identifies the individual areas and counties comprising those areas within North Carolina that EPA intends to designate as nonattainment. Following the table is a description of areas where EPA intends to modify the North Carolina recommendation and the basis for such modification. EPA intends to designate as attainment/unclassifiable all counties not identified in the table below.

Nonattainment Areas				
Area	North Carolina Recommended Nonattainment Counties	EPA Recommended Nonattainment Counties		
Plott Balsam Mountains, NC	Area above 4000 feet in Haywood	Area above 4000 feet in Haywood.		
Great Smoky Mountains National Park, NC*	Park area in Haywood, Swain	Park area in Haywood, Swain		
Charlotte-Gastonia- Rock Hill, NC-SC*	Gaston, Mecklenburg, Cabarrus except for the northeastern corner (Rimertown, Gold Hill and Mount Pleasant Townships), Portion of Lincoln east of the South Fork of the Catawba River, Rowan County except the northwestern corner (Cleveland, Mount Ulla, Scotch Irish, Steele, and Unity Townships), Portion of Union County covered by the MPO (western portion of county), Portion of Iredell (adjacent county) including Coddle Creek and Davidson Townships.	Gaston, Mecklenburg, Cabarrus, Lincoln, Rowan, Union, and Iredell		
Fayetteville, NC	Cumberland	Cumberland		

Nonattainment Areas			
Greensboro-Winston- Salem-High Point, NC	Alamance, Davidson, Forsyth, Guilford, Jerusalem Township portion of Davie, Portion of Randolph north of Highway 64 and the Asheboro municipal boundary, Stoney Creek Township portion of Caswell (adjacent), New Bethel Township portion of Rockingham (adjacent)	Alamance, Davidson, Forsyth, Guilford, Davie, Randolph, Stokes, Yadkin, Caswell and Rockingham	
Hickory-Morganton- Lenoir, NC	MPO portions of Burke, Caldwell, and Catawba and the municipality of Taylorsville in Alexander	Burke, Caldwell, Catawba, and Alexander	
Raleigh-Durham-Chapel Hill, NC	Durham, Orange, Wake, eastern portion of Chatham (Baldwin, Center, New Hope, and Williams Townships), southern portion of Franklin (Franklinton and Youngsville Townships), western portion of Johnston (west of I-95), Dutchville Township in Granville (adjacent), Bushy Fork Township in Person (adjacent)	Durham, Orange, Wake, Chatham, Franklin, Johnston, Granville and Person.	
Rocky Mount, NC	Municipality of Leggett portion of Edgecomb	Edgecomb and Nash	

^{*} Interstate areas: The Tennessee portion of the Great Smoky Mountains National Park will be addressed in the Tennessee letter; The South Carolina portion of the Charlotte-Gastonia-Rock Hill area will be addressed in the SC letter.

Modifications to North Carolina's Recommendations

Charlotte-Gastonia-Rock Hill, NC-SC

Modification of MSA Counties with Violating Monitors

The State recommended Gaston and Mecklenburg Counties, and portions of Cabarrus, Iredell, Lincoln, Rowan and Union Counties. EPA intends to modify the State's recommendation to include the whole counties of Lincoln, Rowan, and Union counties in the Charlotte-Gastonia-Rock Hill, NC-SC nonattainment area. This was done because these counties are within the presumptive nonattainment area, contain violating monitors, and the State's justification based on

justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these three counties. The State proposed to exclude portions of Lincoln (portion east of the South Fork of the Catawba River), Rowan (Cleveland, Mount Ulla, Scotch Irish, Steele, and Unity Townships), and Union (MPO boundary (western portion of county)) counties.

Lincoln County:

There is a violating monitor in Lincoln County, located near the center of the county and just east of the proposed boundary. The State provided information related to the 11 factors, including that Lincoln County does not have any large sources of NOx or VOC, 1.4 percent of the daily vehicle miles traveled (VMT) is from people living in Lincoln County and commuting to Mecklenburg County to work, and 4.7 percent of the CMSA population live in Lincoln County. However, there was not a compelling argument that the proposed partial boundary for Lincoln County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Rowan County:

Rowan County contains two violating monitors. There are two large sources of NOx, the Buck Steam Station and the Transcontinental Gas Pipeline pumping station which are included in the area recommended by the State as part of the nonattainment area. The State provided information related to the 11 factors, including that 1.0 percent of the people that commute to Mecklenburg County to work live in Rowan County and 7.5 percent of the county population live in the area being excluding from the nonattainment area. However, there was not a compelling argument that the proposed partial boundary for Rowan County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Union County:

Union County contains a violating monitor located near the center of the county. The State provided information related to the 11 factors with respect to Lincoln, including that the county has no large sources and the excluded portion has low population density. However, there was not compelling evidence that the boundary should be drawn equivalent to the MPO boundary, particularly considering the projected growth.

Modification of MSA Counties without Violating Monitors

The State recommended a portion of Cabarrus County. The EPA intends to modify the State's recommendation to include the whole county of Cabarrus County in the Charlotte-Gastonia-Rock Hill nonattainment area. This county is within the presumptive area and State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for this county. The State proposed to designate Cabarrus County as nonattainment with the exception of Rimertown, Gold Hill and Mount Pleasant Townships.

Cabarrus County:

Although Cabarrus County does not contain a violating monitor, this county is in the presumptive nonattainment area and is surrounded by counties with violating monitors. The State provided information related to the 11 factors, including that the county does not have any large sources of NOx, 4.8 percent of the people living in Cabarrus County commute to Mecklenburg County to work, 6.5 percent of the county population live in the area being excluding from the nonattainment area. However, there was not a compelling argument that the proposed partial boundary for Cabarrus County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of Adjacent Counties without Violating Monitors

The State recommended that the Coddle Creek and Davidson Townships in southern Iredell County (adjacent to the CMSA) be included in the Charlotte-Gastonia-Rock Hill nonattainment area. The EPA intends to modify the State's recommendation to include the whole county of Iredell County in the Charlotte-Gastonia-Rock Hill nonattainment area. This county is adjacent to the presumptive area and the State's information based on the 11 factors did not a compelling argument to exclude a portion of this County.

Iredell County:

Iredell County does not contain an ozone monitor, however, the bordering counties to the east, west and south have violating monitors. The State provided information related to the 11 factors, including that the portion of Iredell County that the State recommended as attainment has a low population density, the county population is approximately eight percent of the population of the MSA plus Iredell County, and Iredell contributes two percent of the commuters into Mecklenburg County, 9,604 people. However, there was not a compelling argument that the proposed partial boundary for Iredell County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Greensboro-Winston-Salem-High Point, NC

Excluding Counties within the CMSA

The State recommended that Alamance, Davidson, Forsyth, and Guilford Counties, and portions of Caswell, Davie, Randolph and Rockingham Counties be included in the Greensboro-Winston-Salem-High Point nonattainment area. The State recommended omitting the counties of Stokes and Yadkin based on an analysis using the 11 factors.

Modification of MSA Counties with Violating Monitors

The State recommended portions of Davie and Randolph Counties, which are within the CMSA. EPA intends to modify the State's recommendation to include the whole counties of Davie and Randolph Counties in the Greensboro-Winston-Salem-Highpoint nonattainment area. This was done because these counties are within the presumptive nonattainment area and these counties contain violating monitors and the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties. The State proposed to omit all of Davie County except Jerusalem Township and the portion of Randolph County south of Highway 64 and the Asheboro municipal boundary.

Davie County:

Davie County contains a violating monitor and is within the CMSA. The State provided information related to the 11 factors, including that there are no large sources of NOx or VOC, and that the county contributes 3.1 percent of the workforce in Forsyth County and 0.2 percent of the workforce in Guilford, that this county has the smallest population of any of the counties in the CMSA, and the recommended area is the same as the 1-hour ozone boundary. However, there was not a compelling argument that the proposed partial boundary for Davie County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Randolph County:

Randolph County contains a violating monitor and is within the CMSA. The State provided information related to the 11 factors, including that the county does not have any large sources of NOx or VOC, approximately 7.5 percent of the people living in Randolph County commute to Guilford County to work, 70 percent of the county population lives in the area included in the nonattainment area, and the population density in the southern portion of the county is less than 100 people per square mile. However, there was not a compelling argument that the proposed partial boundary for Randolph County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of Adjacent Counties with Violating Monitors

The State recommended portions of the adjacent counties of Caswell and Rockingham. EPA intends to modify the State's recommendation to add the Stoney Creek Township in Caswell County (adjacent) and New Bethel Township in Rockingham County (adjacent) to the Greensboro-Winston-Salem-Highpoint nonattainment area. While these counties are outside of the presumptive boundary, both contain a violating monitor. Although, the State submitted a justification based on the 11 factors to include only the referenced townships in these two adjacent counties, there was not a compelling argument for the area recommended. Therefore, EPA will modify the State's recommendation to include both counties in their entirety.

Caswell County:

Caswell County contains a violating monitor. The State provided information related to the 11 factors, including that there are no large point sources, low population, and low population density. However, there was not a compelling argument that the proposed partial boundary for Caswell County is the appropriate one for the nonattainment area.

Rockingham County:

Rockingham County contains a violating monitor and has two large point sources of NOx, the Dan River Power Plant that emits about 14 tons per day and the Transcontinental Gas Pipeline pumping station, emitting approximately 15 tons per day. The State provided information related to the 11 factors, including that both of these sources are installing NOx controls to meet the NOx SIP Call, the county has low population, and has low population density. However, there was not a compelling argument that the proposed partial boundary for Rockingham County is the appropriate one for the nonattainment area.

Modification of Early Action Compact Counties in a Violating CMSA

Stokes and Yadkin Counties:

EPA is modifying the State's recommendation to include Stokes and Yadkin Counties in the Stokes and Yadkin, NC nonattainment area because they are within the Greensboro-Winston-Salem-Highpoint CMSA, which has a violating monitor and these counties are participants in the Greensboro-Winston-Salem-Highpoint Early Action Compact (EAC). Stokes and Yadkin Counties, as well as other Greensboro-Winston-Salem-Highpoint CMSA counties in the EAC, will be designated nonattainment with a deferred effective date so long as the Greensboro-Winston-Salem-Highpoint EAC meets all of the required milestones.

Hickory-Morganton-Lenoir, NC

The State recommended portions of Alexander, Burke, Caldwell and Catawba Counties which includes the Metropolitan Planning Organization boundary. EPA intends to modify the State's recommendation to include the whole counties of Alexander, Burke, Caldwell, and Catawba Counties in the Hickory-Newton-Conover nonattainment area. These counties are within the presumptive area and two of them contain violating monitors.

The State's submittal indicated that the proposed boundary encompasses 75 percent of the population and the areas left out of the recommended boundary have a population density less than 250 people per square mile with much of the outlying areas at less than 50 people per square mile. However, the municipal boundary of Taylorsville is noncontiguous with the rest of the nonattainment area and the State did not provide adequate justification to support a noncontiguous area. Additionally, the recommended area does not include the Marshall Steam

Station located in southwestern Catawba County. Although the source will install controls to meet the NOx SIP Call and the Clean Smokestacks Legislation, the emission reduction is only 50 percent of the current NOx Levels. The State provided information related to the 11 factors, however, there was not a compelling argument to exclude the recommended portion of these counties. We do acknowledge that the Caldwell County monitor appears to be in attainment based on preliminary 2001-2003 data; however the Alexander County monitor in Taylorsville continues to violate.

Raleigh-Durham-Chapel Hill, NC

Modification of MSA Counties with Violating Monitors

For the counties within the CMSA, the State recommended Durham, Orange and Wake Counties, and recommended portions of Chatham, Franklin and Johnston Counties. EPA intends to modify the State's recommendation to include the whole counties of Franklin and Johnston in the Raleigh-Durham-Chapel Hill nonattainment area. This was done because these counties are within the presumptive nonattainment area, each has a violating monitor, and the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties. The State proposed to include only the southern portion of Franklin (Franklinton and Youngsville Townships) County and the portion of Johnston County west of I-95.

Franklin County:

There is a violating monitor is located in Franklinton Township and Franklin County is in the CMSA. The State provided information related to the 11 factors, including that Franklin County does not have any large point sources, has very low NOx and VOC emissions, and the excluded area has low population density. However, there was not a compelling argument to exclude the recommended portion of Franklin County, particularly considering the projected growth.

Johnston County:

Johnston County contains a violating monitor and is in the CMSA. The State provided information related to the 11 factors, including that Johnston County does not have any large point sources and most (76 percent) of the total NOx emissions in the County come from mobile sources. However, there was not a compelling argument that the proposed partial boundary for Johnston County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Modification of MSA Counties without Violating Monitors

The State recommended a portion of Chatham County. EPA also intends to modify the State's recommendation to include the whole County of Chatham in the Raleigh-Durham-Chapel

Hill nonattainment area. This County is within the presumptive area and the State's justification based on the 11 factors did not provide a compelling argument to exclude the proposed portion of this county.

Chatham County:

Chatham County has one large point source of NOx, the Cape Fear Steam Station which emits 19.67 tons per day. This source is not included in the portion of the County recommended by the State to be included in the nonattainment area. The source is installing controls to meet the NOx SIP Call, but not SCR. Although the County is monitoring attainment, the State did not provide a compelling argument that the portion of the County excluded from the nonattainment area is not contributing to violations within the CMSA, particularly considering the projected growth.

Modification of Counties Adjacent to MSA with Violating Monitors

The State recommended portions of Granville and Person Counties which are adjacent to the CMSA to be included in the nonattainment area. EPA intends to modify the States recommendation to include the whole counties of Granville and Person in the Raleigh-Durham-Chapel Hill nonattainment area. The State recommended adding Dutchville Township in Granville (adjacent) and Bushy Fork Township in Person (adjacent) to the Raleigh-Durham-Chapel Hill nonattainment area. While these counties are outside of the presumptive boundary, they both contain a violating monitor the State's justification based on the 11 factors did not provide a compelling argument for the partial boundaries recommended for these two counties.

Granville County:

Granville County contains a violating monitor. The State provided information related to the 11 factors, including that the county has no large point sources, has low NOx and VOC emissions, and the northern portion of Granville County is largely rural. Additionally, the proposed area is the same as the 1-hour ozone boundary. However, there was not a compelling argument that the proposed partial boundary for Granville County is the appropriate one for the nonattainment area, particularly considering the projected growth.

Person County:

Person County contains a violating monitor and has two large point sources of NOx, the Roxboro and Mayo Power Plants that together emit about 217.72 tons per day. The State provided information related to the 11 factors, including that the large sources are installing SCR controls on all units to meet the NOx SIP Call and the Clean Smokestacks Legislation which will reduce their combined emissions to 29 tons per day, the county has low population and population density. However, there was not a compelling argument that the proposed partial boundary for Person County is the appropriate one for the nonattainment area.

Rocky Mount, NC

The State recommended portions of Nash and Edgecombe Counties as nonattainment. EPA intends to modify the State's recommendation to include both of these entire counties.

Nash County:

We intend to modify the State's recommendation to include Nash County in the Rocky Mount nonattainment area. This was done because this county is within the presumptive nonattainment area and the State did not submit information based on the 11 factors to exclude this County.

Edgecombe County:

The State recommended the municipality boundary of Leggett in Edgecombe County as the Rocky Mount nonattainment area. We intend to modify the State's recommendation to include all of Edgecombe County in the Rocky Mount nonattainment area. This county is within the presumptive area and contains a monitor violating the 8-hour ozone NAAQS and there was not a compelling argument to exclude this county. The State submitted information based on the 11 factors that this county is largely rural in nature, had declining population, and low VOC and NOx emissions, they did not make a compelling argument as to why the nonattainment area should encompass only the municipality containing the violating monitor.

The following table identifies the individual areas and counties comprising those areas within North Carolina that EPA intends to designate as nonattainment because the State's recommendation was made to designate the area as nonattainment based on 2000-2002 monitoring data where current preliminary 2001-2003 data show that the area may not be violating the 8-hour standard.

Recommended Nonattainment Areas				
Area	North Carolina Recommended Nonattainment Counties	EPA Recommended Nonattainment Counties		
Asheville, NC	Buncombe	Buncombe		
Blue Ridge, Black and Great Craggy Mountains, NC	Area above 4000 feet in Buncombe, McDowell, and Yancey	Area above 4000 feet in Buncombe, McDowell, and Yancey		
Great Balsam Mountains, NC	Area above 4000 feet in Haywood, Jackson, and Transylvania	Area above 4000 feet in Haywood, Jackson, and Transylvania		

Asheville, NC

While the recommendation was made to designate Buncombe County as the Asheville, NC, nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Blue Ridge, Black and Great Craggy Mountains, NC

While the recommendation was made to designate these mountain tops as a nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Great Balsam Mountains, NC

While the recommendation was made to designate these mountain tops as a nonattainment area based on 2000-2002 monitoring data, more current preliminary 2001-2003 data show that the area is not currently violating the 8-hour standard. While EPA will consider modifying the recommendation to designate this area to attainment, we will retain North Carolina's recommendation of nonattainment while we continue to evaluate the monitoring data to conclude whether it supports such a modification. It is critical for North Carolina to expedite submittal of 2003 monitoring data so that air quality designations and classifications for the 8-hour standard will accurately reflect the State's air quality.

Enclosure 2

Justification for areas where EPA is not modifying the State's recommendation.

Fayetteville, NC

The State recommended the presumptive boundary, i.e., the entire CMSA. Therefore, the Agency agrees with the State's recommendation.

Plott Balsam Mountains, NC

The State recommended the area above 4000 feet as the nonattainment area. The State submitted information indicating that the violations of the 8-hour ozone standard at the monitors located at the high elevations were due to long range transport and the area was not generating emissions that caused the violations. Therefore, the Agency agrees with the State's recommendation.

Great Smoky Mountains National Park, NC

The State recommended that the entire Great Smoky Mountains National Park be designated as nonattainment. The State consulted with the National Park Service. Therefore, the Agency agrees with the State's recommendation.